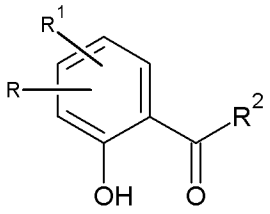
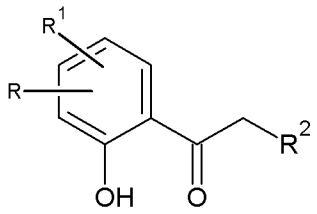


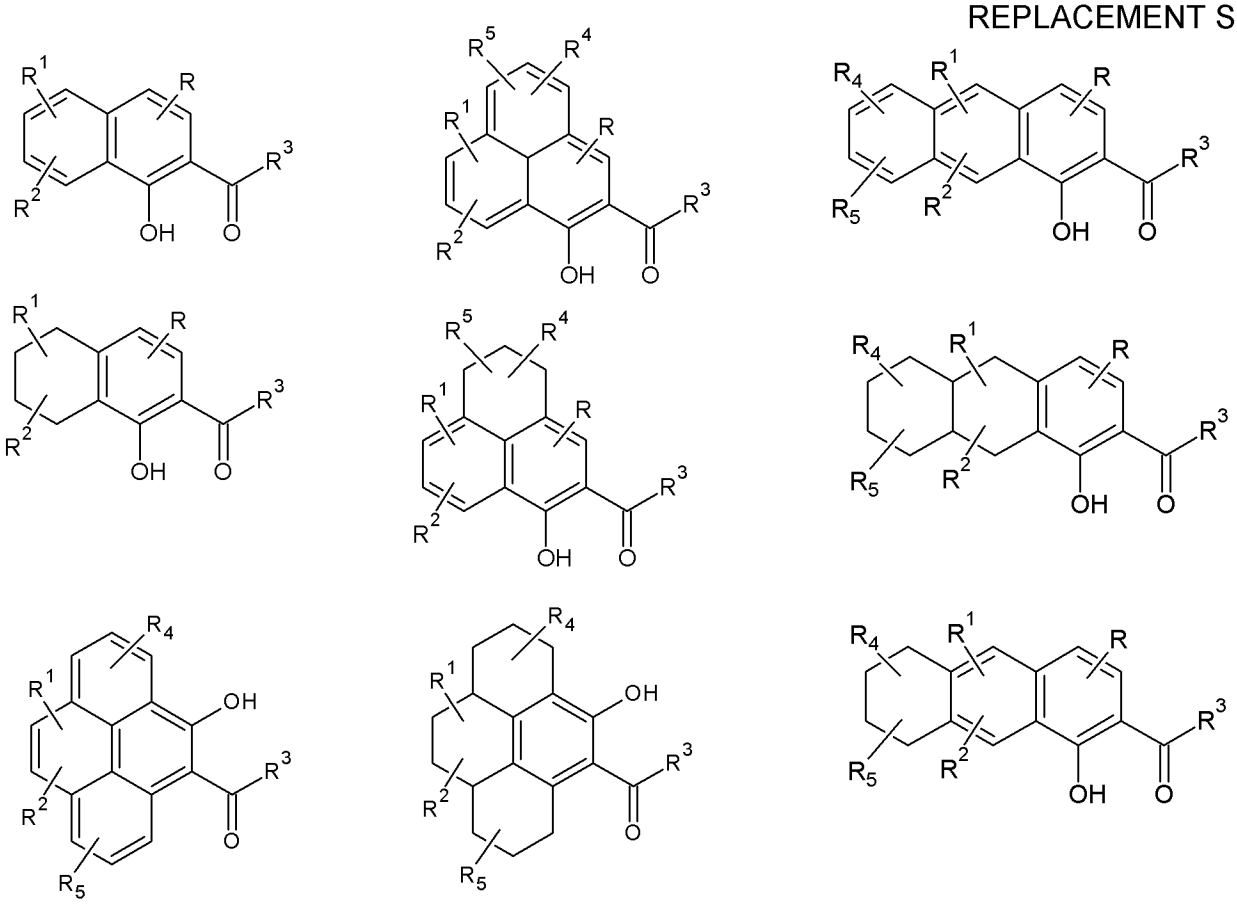
R , R^1	R^2
H	CH_3
CH_3	$-CH_2CH_3$
Alkyl	CH_2R
Cycloalkyl	CH_2Aryl
Aryl	
Cl	
Br	
NH_2	
-NHAlkyl	
$-N(Alkyl)_2$	
-OH	
-SH	

Figure 1. Hydroxyaryl Alkyl Ketone MMP Inhibitors



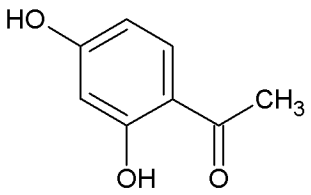
R , R^1	R^2
H	H
CH_3	CH_3
Alkyl	CH_2R
Cyclo-Alkyl	
Aryl	
Cl	
Br	
NH_2	
-NH-Alkyl	
$-N(Alkyl)_2$	
-OH	
-SH	

Figure 2. Hydroxy Acetophenone and Hydroxy Propiophenone MMP Inhibitors

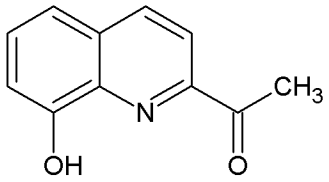


R , R^1 , R^2 , R^4 , R^5	R^3
H	CH_3
CH_3	$-CH_2CH_3$
Alkyl	CH_2R
Cycloalkyl	CH_2Aryl
Aryl	
Cl	
Br	
NH_2	
-NHAlkyl	
$-N(Alkyl)_2$	
-OH	
-SH	

Figure 3. Hydroxyaryl Alkyl Ketone MMP Inhibitors with Additional Cyclic Rings

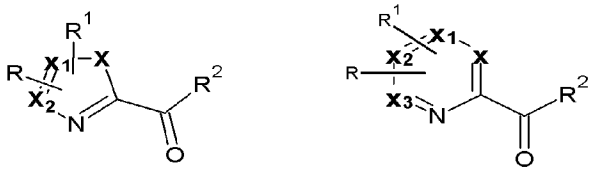


2,4 - Dihydroxy Acetophenone



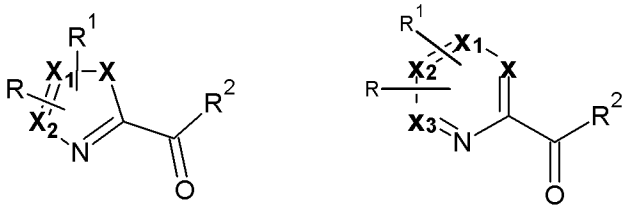
2 - Acetyl - 8 - Hydroxyquinoline

Figure 4. 2,4- Dihydrox Acetophenone and 2-Acetyl-8-Hydroxyquinoline MMP Inhibitors



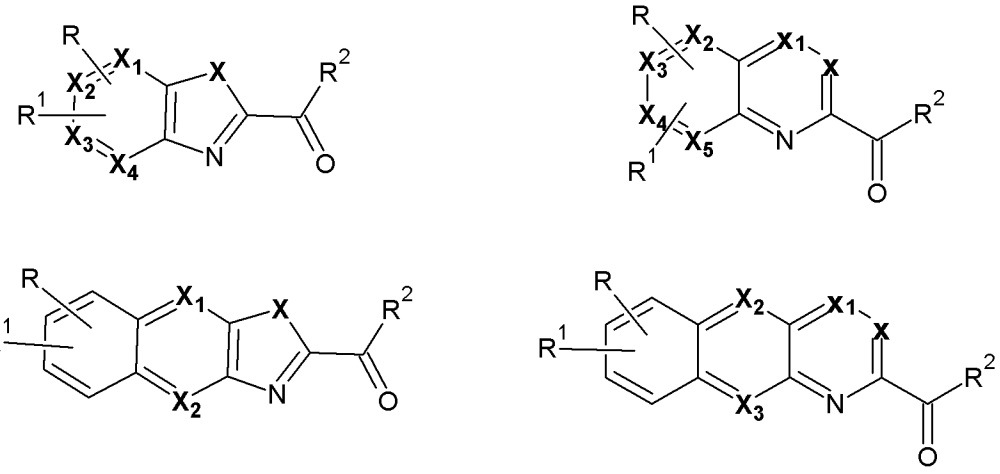
R, R^1	R^2	X, X_1, X_2, X_3
H	CH_3	CH_2
CH_3	$-CH_2CH_3$	CH
Alkyl	Alkyl	O
Cycloalkyl	Aryl	S
Aryl	Cycloalkyl	N
Cl		
Br		
NH_2		
$-NH^-Alkyl$		
$-N(Alkyl)_2$		
-OH		
-SH		

Figure 5. Five & Six Membered N-Heterocyclic Alkyl Ketone MMP Inhibitors



R , R^1	R^2	X, X_1, X_2, X_3
H	CH_3	CH_2
CH_3		CH
Alkyl		O
Cycloalkyl		S
Aryl		N
Cl		
Br		
NH_2		
-NH-Alkyl		
$-N(Alkyl)_2$		
-OH		
-SH		

Figure 6. 2-Acetyl Substituted N-Heterocyclic MMP Inhibitors



R , R^1	R^2	X, X_1, X_2, X_3, X_4, X_5
H	CH_3	CH_2
CH_3	$-CH_2CH_3$	CH
Alkyl	Alkyl	O
Cycloalkyl	Aryl	S
Aryl	Cycloalkyl	NH
Cl		
Br		
NH_2		
$-NH^-$Alkyl		
$-N(Alkyl)_2$		
-OH		
-SH		

Figure 7. N-Heterocyclic Alkyl Ketone MMP Inhibitors with Additional Cyclic Rings

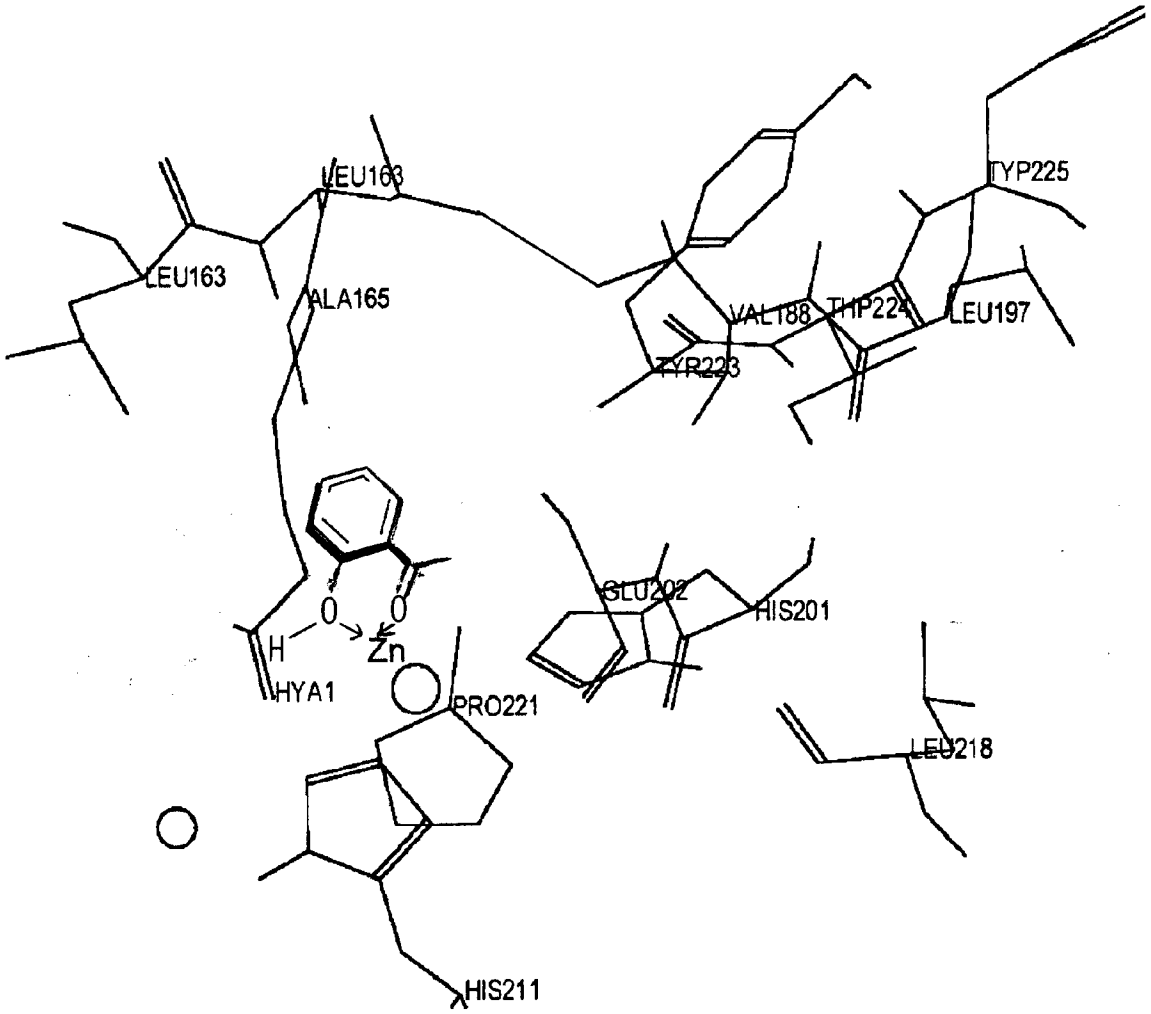


Figure 8. Proposed Inhibition of the Active-Site of MMP by Hydroxyaryl Alkyl Ketones